

Appl. No. 10/619,778

Amdt. dated 06/07/2006

Reply to Office action of 03/22/2006

AMENDMENTS TO THE CLAIMS

In the Claims: Please cancel all original claims and add new claims 1-12.

1-34. (canceled)

35. (currently amended) A process for transfecting a nucleic acid into a cell *in vivo*, comprising:

- a) attaching a labile membrane activity inhibitor to a membrane active peptide via a labile linkage, wherein the inhibitor is detached within the cell;
- b) adding the peptide to a solution containing the nucleic acid;
- c) delivering the peptide and nucleic acid to the cell, wherein the peptide and the nucleic acid are endocytosed; and,
- d) transfecting the cell.

36. (currently amended) The process of claim [[2]] 35 wherein the peptide consists of pardaxin.

37. (currently amended) The process of claim [[2]] 35 wherein the peptide consists of KL3.

38. (currently amended) The process of claim [[2]] 35 wherein the peptide consists of magainin.

39. (currently amended) The process of claim [[2]] 35 wherein the labile linkage is selected from the group consisting of pH-labile, very pH labile, and extremely pH-labile.

40. (currently amended) The process of claim [[2]] 35 wherein the labile linkage is selected from the group consisting of disulfide, acetal, ketal, enol ether, enol ester, amide, imine, imminium, enamine, silyl ether, silazane, and silyl enol ether bonds.

41. (currently amended) The process of claim [[6]] 35 wherein the labile linkage is selected from the group consisting of diols, diazo, ester, sulfone, and silicon-carbon bonds.

42. (previously presented) A process for transfecting a nucleic acid into a cell *in vivo*, comprising:

- a) attaching a reversible labile membrane activity inhibitor to a melittin peptide wherein the inhibitor is detached upon association with the cell;
- b) adding the peptide to a solution containing the nucleic acid;
- c) contacting the peptide and nucleic acid with the cell, wherein the peptide and the nucleic acid are endocytosed; and,
- d) transfecting the cell.

43. (currently amended) A process for transfecting a nucleic acid into a cell *in vivo*, comprising:

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- a) attaching a ~~reversible labile~~ membrane activity inhibitor to a membrane active polymer via a labile linkage wherein the inhibitor is detached upon association with the cell;
  - b) adding the membrane active polymer to a solution containing the nucleic acid;
  - c) contacting the membrane active polymer and nucleic acid with the cell wherein the membrane active polymer and the nucleic acid are endocytosed; and,
  - d) transfecting the cell.
44. (currently amended) The process of claim ~~[[9]]~~ 43 wherein the labile linkage is selected from the group consisting of pH-labile, very pH labile, and extremely pH-labile.
45. (currently amended) The process of claim ~~[[9]]~~ 43 wherein the labile linkage is selected from the group consisting of disulfide, acetal, ketal, enol ether, enol ester, amide, imine, imminium, enamine, silyl ether, silazane, and silyl enol ether bonds.
46. (currently amended) The process of claim ~~[[11]]~~ 43 wherein the labile linkage is selected from the group consisting of diols, diazo, ester, sulfone, and silicon-carbon bonds.